FARM

Topics for Discussion

To afford an opportunity for the interchange of ideas, and to provide a place where information may be given and received, we publish each week at the head of this department a list of topics, which our readers are invited to discuss. Opposite each topic is the date of publication of contributions on it and readers are reminded that articles contributed on any of the subjects given must be in our hands at least ten days earlier than the subject is scheduled for discussion in our columns.

Readers will understand that this department of the paper is theirs. They are invited to write the editor freely expressing their opinion of the manner in which it is conducted and to suggest topics. If any reader has in mind a question which he or she may think can be profitably discussed, it will be given a place in the order of subjects if it is deemed of sufficient general interest. Because this notice runs weekly at the head of the Farm Department does not mean that farm questions, only, may be taken up. The discussions will be spread over every department of the paper.

For the best article received on each topic we will award a first prize of Three Dollars and for the second best Two Dollars, paying the latter sum for the contributions on the subject received and published in the same issue.

Articles should not exceed 500 words in length.

December 1.—*What do you feed to supply animal matter to the hens during the winter months? How do you prepare and feed it, and have previous results shown it to be satisfactory?*

December 8.—*Give directions for killing, cutting up and curing pork or beef on the farm.*

December 15.—*As our special Christmas number is being issued on this date no regular discussion will appear. If any of our readers feel they have a special message we shall endeavor to find room for it and pay regular space rates.*

December 22.—*How would you set about preparing a sample of grain for display at a seed fair? The possession of a high quality of grain being assumed, what information can you offer regarding the cleaning or selection of the sample to enable the exhibitor to stand a chance of getting near the top in close competition?*

Lessons of the Past Season

What fact in connection with your work has been most impressed upon you during the past season? From the contributions received the two that follow have been selected for publication. A. E. Wilson touches upon two questions of importance to the grain farmer, suggestion fall cultivation for summer fallows, that is cultivation the fall previous to the season the land is fallow, and the drainage of sloughs. A. Cooper deals with another phase of agriculture. He lives in part of the West where mixed farming is beginning to displace grain growing, and is one of the staunchest advocates of mixed farming in Manitoba; not only an advocate either, for he is following mixed farming successfully himself.

Impressions of the Season 1909

EDITOR FARMER'S ADVOCATE:

The most important fact that has been impressed upon me from work and observation during the past season, both in my own neighborhood and on somewhat extensive trips, as far as the Western boundary of the province and north along the C. N. R. is this: That the weed problem is the largest problem Western farmers have to face. I look upon its importance as lying in the fact that whatever tends to reduce the average yield permanently, is a heavy discount on that margin of profit for which the farmer is investing large amounts of capital in labor, horses and machinery. The evil is not one that is with us this year and passes by the next, but has become a permanent and growing mortgage on the wheat lands, reducing the yield, increasing the dockage and is, I believe, largely responsible for the millers' complaint that the milling value is getting less. If the weed evil is not removed or checked, the wheat growing area of our farms will eventually be much reduced, by having a large proportion of each farm deflected for a course of years to some form of diversified farming, for which perhaps it may not be so well adapted.

The chief objects of our summer fallowing operations are the cultivation of the land, the destruction of weeds and, especially in this province, the conservation of moisture. After the most painstaking efforts in this direction we still find among the growing crops a prolific supply of noxious weeds and wild oats robbing the land of that moisture which is so essential to the growing plants, and reducing and sometimes totally vanishing that portion of the average yield which is the farmer's margin of profit. Especially is this the case in the older portions of the province, where the land has been longer under cultivation. With the newer portions of the province it is only a question of time until similar conditions will prevail.

Of course the weed problem is no new question, and the solution, where it can be readily adopted, is mixed farming; but on the heavy lands of the open prairies in this province wheat is still king, and I believe will remain so till we have exhausted every means of keeping our land fairly clean and conserving its moisture. To accomplish this a new solution must be looked for. Hitherto we have depended chiefly on the summer season for summer fallowing operations and find we are unable to propagate and destroy a sufficient quantity of weeds. The season for this work must, if possible, be lengthened, by getting on to the summer fallows the previous fall and fall plowing or top cultivating all land to be summer fallowed the succeeding year.

The open fall we have had this year has enabled us to do a considerable amount of fall plowing, but the average fall would be altogether too short to perform this with horses, and motor power must of necessity be substituted. The gasoline engine seems likely to solve this portion of the problem. They are by no means perfect and the price is altogether too high for the horse-power developed, but I believe that in the near future they will be so improved that they will materially reduce our stock of horses, and render the fall plowing of an extensive summer fallow a question of days instead of weeks. This would considerably lengthen the season for growing and destroying weeds.

Fencing and keeping a flock of sheep during the summer months on land that is being summer fallowed would not only be remunerative, but would save labor and to some extent pack the land and enable it to resist the "blows" so damaging in the spring.

Another product of our fields, on which there is no margin of profit, and which in some respects might be bracketed with weeds and wild oats, is the unsatisfactory and immature sample of wheat we get from sloughs and land which is periodically flooded. In the majority of cases this can be made good by drainage. If the natural fall of the land can be ascertained when there is a surplus of water, an open ditch, made by plow and scrapers, will be found very effective and the sides may so slope that they offer no serious obstacle to binders or other farm implements.

Sask. A. E. WILSON.

An Old Fact Re-Emphasized

EDITOR FARMER'S ADVOCATE:

The need of more live stock in order to not only maintain but increase soil fertility is an old fact which is yearly re-emphasized. Present high prices for grain make it an almost hopeless task to preach the doctrines of live stock raising, and generally speaking the Western farmer is naturally disinclined to give serious attention to mixed farming. This seems to be a feature in the development of the agriculture of every new country, and a phase which, though temporary, is nevertheless still sufficiently evident to cause alarm in Western Canada.

Another prominent reason for the languishing state of the live stock industry and consequent dearth of good cattle and hogs is popularly attributed to unsatisfactory markets, low prices, poor transportation and stock yard facilities.

Still another hindrance to the proper development of live stock raising is the inability of a large number of the immigrants, which Western Canada is depending on for population, to adapt themselves to any mode of agriculture other than grain growing. However, the rapid expansion which is taking place in all lines of industry is providing other employment for those who are not gifted by nature with proper farming instincts. To such people the incessant care and attention required to practice an extensive system of farming would be wearisome, for real tangible success is often only obtained after years of tedious effort.

Perhaps the traditional antipathy which the Western farmer has to live stock is founded on a strange and dangerous belief common to the pioneer in all new countries. This is the belief that the land he occupies is so exceptional in its composition that the laws of nature, which history proves are of universal application in all other sections, are not in operation on his own farm or district, and consequently it will never become infertile, even when the crudest methods are employed.

It is a condition of things which is inevitable, and perhaps at the beginning almost necessary in the development of the agriculture of every new country, because grain-raising is along the lines of least resistance, and, barring accidents, gives the quickest and surest returns.

Though the Western climate undoubtedly has many drawbacks, the feeling that it is unsuitable for the production of choice live stock has been outgrown. We may never be able to grow as great a variety of feeds as is done in the East and South, but our coarse grain is produced more cheaply than elsewhere and it has been abundantly proved that remarkable yields of fodder corn and roots can be obtained. Other feed crops are being gradually introduced and will no doubt be grown extensively in the future.

With these materials and the requisite suitability of mind and purpose to make the best use of them, true permanent husbandry, with live stock as its basis, will take the place of the present happy-go-lucky simple form of agriculture. In spite of all obstacles, however, many farmers can be found who are adapting their operations to the requirements of diversified agriculture, realizing that by more extensive methods only can the producing power of the farm be increased and the business built up and maintained on a permanent basis. To these men live stock are as necessary to their contentment as the companionship of the family and all other human friends. They love the farm, its surroundings and atmosphere, and by concentrating their thoughts and studies on every branch of their work, acquire special knowledge to enable them to conduct their operations profitably.

To such men the amount of profit, though never lost sight of, is of minor importance. It cannot always be counted in dollars and cents, for the belief that wise and prudent methods are being employed brings profits which, though not as discernible as cash, can by the trained eye be readily seen to exist in other forms.

Man. A. COOPER.

Breaks for Less than Fifty Cents per Acre

EDITOR FARMER'S ADVOCATE:

I purchased a 20 h.-p. gasoline tractor in July last. I broke 215 acres, at a cost of $125.00, with good results. I also double disked about 800 acres, pulling four seven-foot disks, and doing about 50 acres per day. The actual expense for gasoline was about $100.00.

The greatest advantage of owning an outfit is that you can thresh your crop as soon as it is ready and start plowing back. In my opinion it would certainly be to the advantage of a farmer, mechanically inclined, working a half-section or more, to purchase one of these outfits.

About 24 gallons gasoline is required for a day's run. With my rig, I run both engine and separator, and this saves the wages of an engineer, fireman, tank team and straw team. I have threshed 46 days so far, doing from 1,000 to 1,200 bushels of wheat, or 2,200 bushels oats per day.

Sask. M. W. RANDALL.

Grain Crops on Brandon Experimental Farm

The following interesting notes on the season's work with the three staple grain crops on the Brandon Experimental Farm have been prepared by Superintendent James Murray:

Farm work generally being pretty well closed up for the season on the Experimental Farm as on all others through the west, brief consideration of some of the results secured may be of interest. The season has been unusual in several respects, in that the spring was very cold and